

one of said subset being located at a location away from said maximum diameter; and

c) second positioning means coupled to said set of electrodes for placing a second predetermined subset of said set of electrodes into contact with a surface of said patient's heart, said second predetermined subset being different from said first subset.

2. The apparatus of claim 1 wherein said set of electrodes comprises at least twenty-four electrodes.

3. A catheter assembly for mapping the interior of a patient's heart comprising:

a) a first set of electrode sites defining a first electrode array, at least one of said first set of electrodes being located near the maximal diameter of catheter assembly and at least one of said first set of electrodes being located apart from said maximal diameter;

b) said electrode array adapted to be positioned within said patient's heart with a substantial number of said electrodes not in contact with said heart; and

c) a second set of electrode sites adapted to be located in contact with said patient's heart, said second set of electrode sites being different from said first set of electrode sites.

4. The catheter assembly of claim 1 wherein said first and second positioning means can be moved with respect to one another.

5. The catheter assembly of claim 1 wherein said first and second positioning means are fixed with respect to one another.

Kindly enter and examiner the following new claims:

Sub D 17 6. A catheter assembly for mapping the interior of a patient's heart comprising:

a) a first set of electrode sites defining a first electrode array, at least one of said first set of electrodes being located near the maximal diameter of catheter assembly and at least one of said first set of electrodes being located apart from

and not in contact with a surface of said patient's heart, at least one of said subset of electrodes being located proximate said maximum diameter, said electrode sites formed on a first subcatheter having a proximal end a distal end, said proximal end for manipulating and positioning said first set of electrode sites in a heart chamber;

b) said electrode array adapted to be positioned within said patient's heart with a substantial number of said electrodes not in contact with said hear; by moving said first subcatheter proximal end; and

c) a second set of electrode sites adapted to be located in contact with said patient's heart, said second set of electrode sites being different from said first set of electrode sites, said second set of electrodes positioned on a second subcatheter, having a proximal end and a distal end , which can manipulated independently of said first subcatheter by manipulating said proximal end.

7. The catheter assembly of claim 6 wherein said first subcatheter has a central lumen for receiving said second subcatheter.

8. The catheter's assembly of claim 7 wherein said first subcatheter and said second subcatheter are coaxial with respect to one another.

9. The catheter assembly of claim 8 where said second subcatheter extends distally of the distal tip of said first subcatheter.

REMARKS

Pending Claims:

In this application, claims 1 through 5 are allowed. Kindly examine claims 6 through 9 presented herewith. They are supported by the specification as filed and are directed to the mechanical relationship of the two electrode sets.